User manual

Digital Cable Receiver HD

EN User manual
DE Bedienungsanleitung
PL Instrukcja obsługi
RU Руководство пользователя

Model ID: CVCAB 3/2010 jp

EN

Contents

1. Safety precautions 1
2. Environment protection 3
3. Features 4
4. Remote control 5
5. Front panel 6
6. Rear panel 7
7. Connecting 8
   7.1. Connecting receiver to TV set using HDMI cable 8
   7.2. Connecting receiver to TV set using component cable 8
   7.3. Connecting receiver to TV set using SCART cable 9
   7.4. Connecting receiver to TV set using RCA cable 9
8. Menu operations 10
   8.1. Menu „Edit Channels” 10
   8.2. Menu „Installation” 12
   8.3. Menu „User Setup” 13
   8.4. Menu „Multimedia” 14
   8.5. Menu „Common Interface” 15
   8.6. Menu „Conax CA” 15
   8.7. Menu „System” 16
9. Function guide 17
   9.1. Channel list 17
   9.2. EPG browser 17
   9.3. Information bar 18
   9.4. Changing services 18
   9.5. Volume control 18
   9.6. Audio settings 18
   9.7. Teletext 18
   9.8. Subtitle 18
   9.9. PVR 18
   9.10. Direct recording 19
   9.11. EPG Recording 19
   9.12. TimeShift-Function 19
   9.13. Playback 19
10. Technical specification 20
11. Declaration of conformity 21

EN

EN

1. Safety precautions

CAUTION:

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to "dangerous voltage" and to prevent from a risk of electric shock.

Warning:
To reduce the risk of electric shock, don't open the cabinet. Refer servicing to qualified personnel only.

The exclamation point within an equilateral triangle is intended to alert the user to important operating and maintenance (servicing).

WARNING: Do not use this STB where contact with or immersion in water is a possibility. Do not use near flower vase, washbowls, kitchen sinks, laundry tubs, swimming pools, etc.

WARNING: Do not put the candle or lamp stand on the cabinet; otherwise, there is the danger of fire.

WARNING: The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the unit. If you are not sure of the type of power supply (for example, 120 or 230 V) to your home, consult your local dealer or local power company.

WARNING: This product install diodes. Do not open the cabinet or touch any parts in the inner mechanism. Consult your local dealer for technical service if the opening is required.

Note: To ensure proper use of this product, please read this User manual carefully and retain for further reference.

Note: This product install diodes. Do not open the cabinet to avoid the unit direct exposure to radiation.

Unit Cleaning: After the unit power is turned off, you can clean the cabinet, panel and remote control with a soft cloth lightly moistened with a mild detergent solution.

Attachments: Never add any attachments and/or equipment without the manufacturer consent; as such additions may result in the risk of fire, electric shock, or other personal injury.

Locating: Slots and openings in the cabinet are provided for ventilation to protect it from overheating. Do not block these openings or allow them to be blocked by placing the STB on a bed, sofa, or other similar surface, nor should it be placed over a radiator or heat register.

EN

Power-Cord Protection: Place the power-supply cord out of the way, where it will not be walked on. Please take special attentions to cords at plugs, convenience receptacles, and the point where they exit from the unit.

Object and Liquid Entry: Never put objects of any kind into this STB through openings, as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill any liquid on the STB.

Note: Moisture may be formed on the lens In the following conditions:

when the unit is suddenly moved from a cold environment or an air-condition room to a warm place.

immediately after a heater has been turned on.

in a steamy or very humid room.

If the moisture forms inside the unit, it may not operate properly. To correct this problem, turn on the power and wait about two hours for the moisture to evaporate.

Parts Replacement: When the unit parts need to be replaced, user should make sure the service technician use the replacement parts specified by the manufacturer or having the same characteristics as the original part. Unauthorized replacement may put the unit In the risk of fire, electric shock or other hazards.

Safety Check: After all the maintenances and repairs are done, user is required to request the service technician to conduct the overall safety check to ensure the machine is In the proper condition.

EN

2. Environment protection

Attention!

Your product Is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.

Information on Disposal for Users (private households) in the European Union

Used electrical and electronic equipment must be treated separately and In accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.

Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge*. In some countries* your local retailer may also take back your old product free of charge if you purchase a similar new one. *) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

Information on Disposal for Business Users

In the European Union

If the product is used for business purposes and you want to discard It:

Please contact your dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling Small products (and small amounts) might be taken back by your local collection facilities,

In other Countries outside the EU

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.

EN

3. Features

- SD / HD support (MPEG4 AVC/H.264)
- Common Interface Slot
- Card Reader
- High Definition Video output: HDMI and YPbPr
- LED Front panel display
- Channel sorting by Alphabetic order & Network FTA, CAS
- EPG: Now, Next events and 7 days schedule
- Subtitle support: OSD & VBI insertion for TV
- Video output resolution: 576p, 720p, 1080i
- Multi language OSD
- Fast Channel Change
- 8 Favorite List & Unlimited Programs per each
- Channel Edit Function: Move, Delete, Favorite, Lock, Rename, Skip
- S/PDIF (Digital Audio or AC3 stream out)
- Software Upgrade via RS-232C & USB

EN

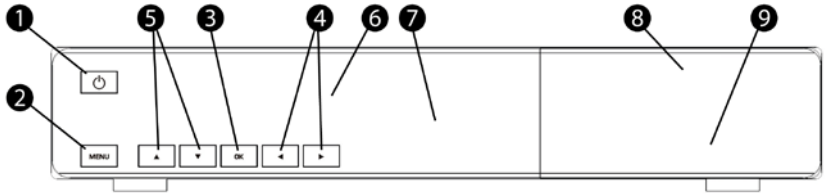
EN

4. Remote control

BUTTON	FUNCTION
POWER	Switch receiver between Operation and Standby mode.
HELP	(Optional function)
TV format	Switch the TV Standard of the Screen. If you have problem with video format setting, switch this button until set the best video resolution
Numeric buttons 0-9	Select the TV or Radio services and menu options.
MENU	Display the Menu on screen or return to previous menu from submenu.
REW	Fast rewind when the progress bar is displayed. Start reverse playback. Change the speed of reverse playback.
STOP	Stop time shift, playback or recording. Stop the MP3 or JPEG player.
REC	Start recording.
↑,↓	Switch to previous / next channel.
←,→	Decrase / incrase sound volume.
OK / ENTER	Display Service List on screen.
INFO	Display the program information box on the screen.
FILE LIST	Display file list.
SLOW	Start slow motion playback.
AUDIO	Select Sound Track and the multilingual if multilingual is available.
SUBTITLE	Activate the subtitle selection Window. Select the subtitle language in the list.
FAV	Display the favorite service list.
STATUS	(Optional function)
OPTION	Multifeed – Option (Optional function)
FIND	Find service by name in service list, organizing services, EPG menu and normal picture mode.
SLEEP	Set time of automatic turning receiver into standby mode..
TEXT	Enable the teletext.
NEXT ⏭	Slide channel list to next 10 channels
PREV ⏮	Slide channel list to previous 10 channels
EPG	Display the EPG on screen when available.
EXIT	Return to the screen.
PLAY/PAUSE	Stop playing video. Enable continue play video. (USB drive mount required)
FF	Start fast forward or fast motion playback. Change the speed of forward playback.
RECALL	Select the previously viewed service.
TV/RADIO	Select the TV/ Radio mode.
MODE	Select the screen aspect ratio
MUTE	Enable / Disable the Audio.

EN

5. Front panel



1.Power button: Switch receiver between standby and working mode.
2.MENU button: Display menu on screen or return to previous menu.
3.OK button: Display channel list on screen, select item in menu.
4.VOL-/VOL + buttons: Decrease / increase sound volume.
5.CH-/CH+ buttons: Switch to previous / next channel.
6.Remote sensor: Detects infrared signal from remote control unit.
7.Display: Indicates operating status of receiver (LED type).
8.Card slot: One CA interface slots for Conax.

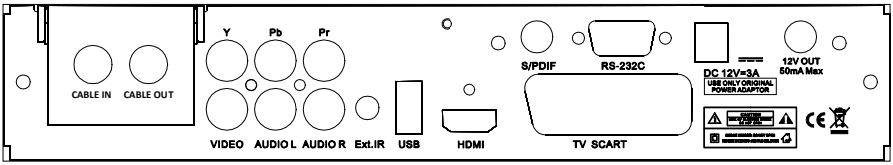
Insert the smart card chip side down!

9.Common interface: One socket for Conditional Access Module CAM.

EN

6. Rear panel

Please refer to the diagram above for all possible connections of your receiver. Do not connect the unit to the mains socket until all other connections have been made and checked. Your configuration can vary depending on model



CABLE IN: Connector to coaxial cable from cable operator.

CABLE OUT: Enables connection of another receiver.

TV SCART: Enables connection of TV Set through SCART cable.

VIDEO: Enables video connection of TV Set through CVBS cable.

12V OUT: Additional power source output for additional devices - 12V DC / 50mA max.

AUDIO L/R: Enables connection of external analog audio amplifier or system.

S/PDIF: Enables connection of digital AV amplifier through RCA cable.

HDMI: Enables digital connection of TV Set through HDMI cable.

USB: Enables connection of external USB hard disk or flash disk.

RS 232C: Enables connection of personal computer through a serial cable.

YPbPr: Enables connection of TV Set through 3xRCA cable.

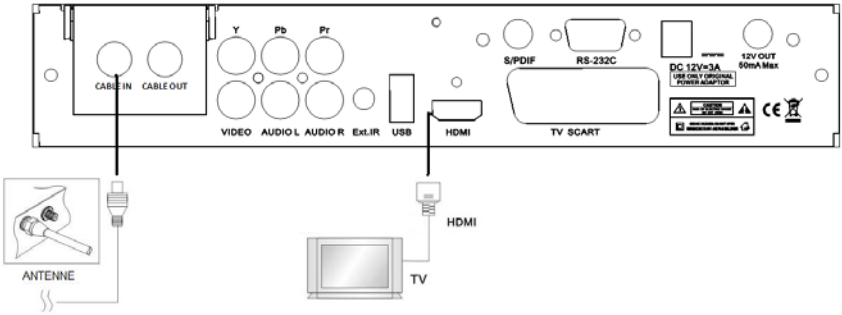
Ext.IR: Enables connection of external infrared detector for remote controller.

DC power connector: Enables connection of external power supply.

EN

7. Connecting

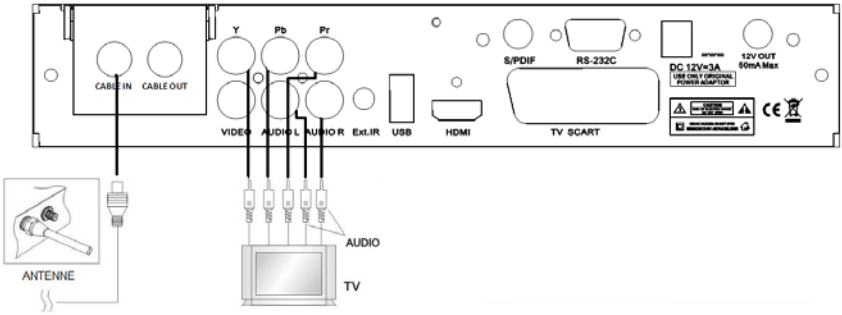
7.1. Connecting receiver to TV set using HDMI cable



a) Connect the coaxial cable to “CABLE IN” terminal marked at the rear of the receiver.

b) Connect HDMI cable to HDMI ports of TV and receiver.

7.2. Connecting receiver to TV set using component cable



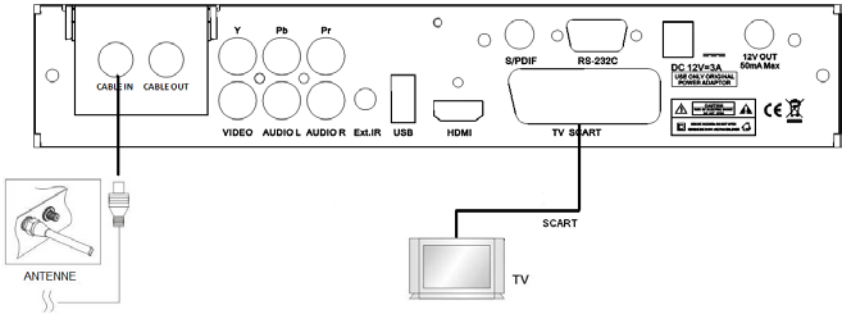
a) Connect the coaxial cable to “CABLE IN” terminal marked at the rear of the receiver.

b) Connect the Component cable to port “YpPbPr” and “Audio L/R” of the Receiver to the respective RCA ports of your TV Set.

c) Select Component in Menu “AV Setting”

EN

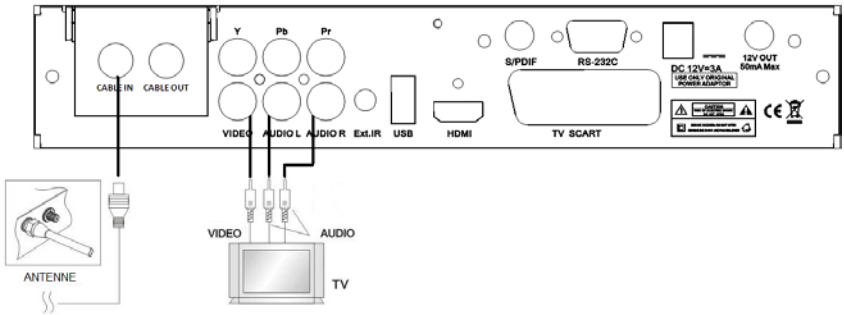
7.3. Connecting receiver to TV set using SCART cable



a) Connect the coaxial cable to “CABLE IN” terminal marked at the rear of the receiver.

b) Connect the SCART cable to port “SCART” of Receiver to the respective SCART port of TV

7.4. Connecting receiver to TV set using RCA cable



a) Connect the coaxial cable to “CABLE IN” terminal marked at the rear of the receiver.

b) Connect the RCA cable to port “Audio L/R” of Receiver to the respective RCA port of TV.

NOTE: On above pictures, positions of connectors may be different. To locate connectors on receiver, see chapter “Rear panel”.

EN

8. Menu operations

This chapter assumes that the HD Receiver system has been installed correctly, meaning:

- The antenna for the receiver is installed and connected to the receiver.
- The receiver is connected to the TV.
- Batteries are installed in remote controller unit (RCU) and RCU is ready to control the receiver.

If the HD Receiver has not been installed or connected properly, please refer to the **"Connecting"** on this manual.

Many of the functions of the HD Receiver are available from the Main Menu. Press " MENU " button to open it.

Buttons ↑,↓ changes currently selected submenu.

Buttons ←,→ changes level of submenu – switches between left and right list of menu functions.

Button **OK** pressed on marked function from right submenu, calls settings of this function.

MENU button pressed in menu, returns cursor to previous submenu level or quits from menu.

EXIT button pressed in menu, quits from menu.

8.1. Menu „Edit Channels"

Menu „Edit Channels" includes 2 submenu items:

- Edit Channels
- Edit Favorite Channels

8.1.1. Edit Channels

This menu can be used to modify channels parameters by delete, lock, skip, move, and rename functions. For better and faster management of list, functions select and find are also available. Edit channels screen consist channel list, preview window, signal and quality bar and functions bar. Functions can be selected by color buttons listed on functions bar. Press one of color button on remote to call corresponding function:

Delete (Red button): Marks channel name on red color. After quit from menu, selected channels will be erased from channel list.

EN

Lock (Green button): Marks channel by lock symbol. After quit from menu, user will have to enter receiver's pin code to watch those channels.

Skip (Yellow button): Marks channel by skip symbol. After quit from menu, channel will disappear from channel list.

Move (Blue button): Marks channel by skip symbol and enable to change this channel position on channel list by ↑,↓ buttons. Another press of **Move** button accepts actual, new channel position.

Rename (Black button): Enables channel name changing by screen keyboard. User can choose letter from keyboard by cursor buttons and accept it by **OK** button. When using keyboard, functions of color buttons are different. Back (Green button) erases last character in channel name. Clear (Yellow button) erases whole name. Toggle (Blue button) changes page of available characters. Save (Red button) quits from keyboard module and saves modified channel name.

Select (White button): Enables select of more than one channel on list and use one from above functions on this group. This function is helpful in mass edition of channels.

Find (Grey button): Enables find of specific channel by name, using intelligent keyboard system. This function is helpful when user needs to quick find channel with specific name.

8.1.2. Edit Favorite Channels

This menu is helpful in adding and deleting services to and from the favorite group.

Edit favorite channels screen consist channel list (left) and favorite list (right). Buttons ←,→ switch cursor between both lists.

- When cursor is on channel list (left) below functions are available:

Add (Red button): Adds channel currently marked by cursor channel to actual favorite list (right)

A_Z (Green button): Sorts Channel list in alphabetical order.

Select (White button): Enables select of more than one channel on list and use one from above functions on this group. This function is helpful in mass edition of channels.

Find (Grey button): Enables find of specific channel by name, using intelligent keyboard system. This function is helpful when user needs to quick find channel with specific name.

- When cursor is on favorite list (right) below functions are available:

Delete (Red button):.Erases channel from favorite list. Channel will not be erased from channel list.

Next FAV (Green button): Changes actual listed favorite list to next. There's 8 favorite lists available.

Rename FAV (Yellow button): Enables favorite list name changing by screen keyboard. User can choose letter from keyboard by cursor buttons and accept it by **OK** button. When using keyboard, functions of color buttons are different. Back (Green button) erases last character in list name. Clear (Yellow button) erases whole name. Toggle (Blue button) changes page of available characters. Save (Red button) quits from keyboard module and saves modified list name.

Move (Blue button): Marks channel by skip symbol and enable to change this channel position on channel list by ↑,↓ buttons. Another press of **Move** button accepts actual, new channel position.

Select (White button): Enables select of more than one channel on list and use one from above functions on this group. This function is helpful in mass edition of channels.

EN

8.2. Menu „Installation”

Menu „Installation” includes 3 submenu items:

- Automatic search cable
- Manual search cable
- Default Setting

8.2.1. Automatic search cable

This function enables quick way to scan channels. Automatic search cable function enables to enter scanning parameters:

Start Frequency, End Frequency: Defines start and end of bandwidth to scan,

Frequency Step: Defines frequency step between next scanned frequencies (0,5 ; 1 ; 7 ; 8 MHz),

Network Search: Uses information optionally provided by the operator, to scan additional frequencies and channels in the network.

Search Range: Enables to scan only FTA/Free Channels, Scrambled Channels or both.

Logical Channel: Uses information optionally provided by the operator, to sort channels.

After defining all needed parameters, **Start Search (Red button)** starts scanning of channels.

8.2.2. Manual search cable

This function enables quick way to scan channels from only one frequency. Manual search cable function enables to enter scanning parameters:

Frequency, Symbol Rate, Constellation: Defines frequency and other parameters to scan,

Network Search: Uses information optionally provided by the operator, to scan additional frequencies and channels in the network,

Search Range: Enables to scan only FTA/Free Channels, Scrambled Channels or both,

Logical Channel: Uses information optionally provided by the operator, to sort channels.

After defining all needed parameters, **Start Search (Red button)** starts scanning of channels.

8.2.3. Default Setting

In this menu, user can delete channels for TV or radio, and also do factory reset of channels, configuration and default setting.

EN

8.3. Menu „User Setup”

Menu „Installation” includes 5 submenu items:

- Language Setting
- Time Setting
- Parental Control
- A/V Control
- OSD Setting

8.3.1. Language Setting

Menu language: Defines preferred language for the system menus.

Audio Language: Some TV programs send multiple audio tracks, for example in two different languages. If there are no audio tracks available that match your settings, another language may be used instead.

Subtitle Language: Defines preferred language for the subtitling and channels information.

8.3.2. Time Setting

This menu contains:

Time Setting: Defines time mode. If user choose “Auto”, time will be taken from broadcast. Then user also must define time offset accordingly to localization. If user choose “Manual”, also must define date and time manually using below functions:

Summer Time: In auto mode, enables additional time offset for summer time.

Time zone: In auto mode, defines time difference of the local time zone from the GMT.

Date: In manual mode enables defining of date manually.

Time: In manual mode enables defining of time manually.

8.3.3. Parental Control

To use the Parental Control function you will be asked to enter your access PIN code. All parental control features work on a locking concept with the PIN code as your entrance key.

The PIN code is set to 0000 at the factory!

Age Control: Toggle the age rating control with ←,→ buttons, specify a suitable age level.

Change PIN code: Use this function to change your PIN code to other four digit number.

- New PIN: Enter a new four digit PIN code by pressing OK key and the number keys on the remote control.
- Verify new PIN code: Re-enter the same new four digit PIN code once again to verify that you got it right.

Menu Lock: After turning ON this, the whole menu could not be changed at will but you enter the PIN code required

8.3.4. A/V Control

In the Audio/video menu, you can modify the properties of the audio and video signals to suit your TV and audio equipment.

TV Type: (Pal / Secam) User can select the video format consistent with your TV

TV Scart: (COMP(HD)/CVBS; COMP(SD)/CVBS; RGB) User can select the video format of the TV SCART output.

Aspect ratio: User can inform the receiver about the display aspect ratio of the TV that is connected to the receiver. Possible choices are: Auto, 4:3 and 16:9 (wide screen).

Display Format: If the user select display aspect ratio of TV set as "4:3", then it is possible to select the preferred aspect ratio conversion scheme where the transmitted program is in "16:9" mode. The possible choices are:

- Pan & Scan: The receiver interprets pan & scan vectors encoded in the program and crops the 16:9 input signal for display on 4:3 TV.
- Letterbox: In this mode the original aspect ratio of the 16:9 input video signal is preserved, thus there are vertical black bars on the top and bottom of the screen.
- Ignore: Use this, if your TV set handles the aspect ratio conversion.

Video Format: With available resolution of 1080i/720p/576p/Auto, user can select the desired settings

AC3: Enables AC3 sound tracks.

8.3.5. OSD Setting

The user can adjust the display time (time of the appearing of the info bar) and the OSD transparency (in %) on top of video signal of the receiver.

8.4. Menu „Multimedia"

Menu „Multimedia" includes 4 submenu items:

- Record List
- PVR Setting
- HDD Properties
- JPEG Viewer

8.4.1. Record List

This list content files with all recorded TV programs.

8.4.2. PVR Setting

You can select the default duration for direct recordings. For direct recordings a window appears which displays the default setting. This can be adjusted at any time.

8.4.3. HDD Properties

In this menu user can see all information about connected hard disk drive as well as an option to format the HDD.

HDD Information: Displays the file system, the total and the used capacity.

HDD Speed: Enables speed test benchmark of connected HDD.

Format: After confirming with the OK key the HDD is formatted.

All files on the Hard-Disk-Drive will be deleted when formatting!

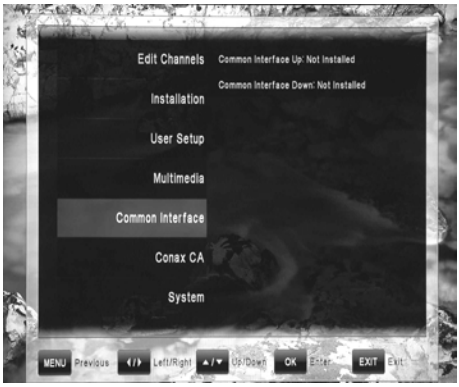
EN

EN

8.4.4. JPEG Viewer

In this menu, user can view JPEG pictures from USB drive connected to receiver USB port.

8.5. Menu „Common Interface”



Menu „Common Interface” includes 1 submenu item:

- Common Interface

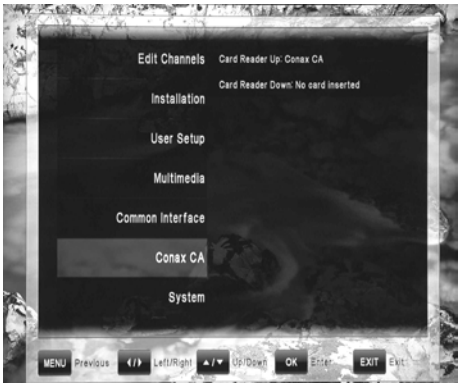
Receiver is equipped with one slot for Common Interface (CI) modules.

To install CI set:

- Open the flap on the front panel of the product.
- Insert the smartcard into the CI module, and the CI module into the slot.

In menu “Common Interface”, user can check the information of CI module.

8.6. Menu „Conax CA”



Menu „Conax CA” includes 1 submenu item:

- Card Reader

Receiver is equipped with Smartcard Reader for CONAX CA.

To install CA card:

- Open the flap on the front panel of the product.
- Insert the smartcard into the smartcard slot with the chip facing downwards.

In menu “Conax CA”, user can check the information of CA card.

NOTE: All information showed in this menu is abstract from CAM & card. In case something is wrong, it may be the problem of CAM or card.

When you insert the CAM correctly at any time, a message will show in the screen to tell you that

which CAM has been detected by the receiver and is available now.

8.7. Menu „System”

Menu „System” includes 3 submenu items:

- Information
- Software Upgrade
- Default Setting

8.7.1. Information

This menu is used to get information about the receiver and its hardware, software and loader.

8.7.2. Software Upgrade

This menu is used to update actual receiver's software. Color buttons filter files according to content (Firmware, Channel Data, All) and enables to make channel list backup. To make software update, please visit producer www site, download file with update dedicated to receiver, save is on USB drive and connect drive to receiver. Enter to Software Upgrade menu, choose downloaded file and confirm.

NOTE: During update do not remove USB drive from USB socket and do not turn off power supply.

8.7.3. Default Setting

In this menu, user can delete channels for TV or radio, and also do factory reset of channels, configuration and default setting.

EN

9. Function guide

9.1. Channel list

Press **OK** button to display **Channel list.**

Buttons ↑,↓ enables changing cursor position on the list. OK button pressed on selected channel, switch actual channel to selected one.

Press one of color button on remote to call corresponding function:

Group (Red button): Limits displayed list of channels to specified groups: All TV, Favorite, Provider, CAS.

Sort (Green button): Changes order of channels on list. Channels can be sorted in order of channel number, channel name or free/scrambled.

Favorite (White button): Limits displayed list of channels to favorites list.

Find (Grey button): Enables to find channel, by entering channel name using keyboard displayed on screen.

9.2. EPG browser

Press **EPG** button to display **EPG browser** EPG browser enables to watch electronic program guide information broadcasted with channels This information describes actual and future events available in TV channels.

In EPG browser window, buttons ↑,↓ switches actual selected channel on list. Buttons ←,→ switches between previous and next event in EPG events table.

Toogle (Green button): switches between two modes of events visualization: daily and weekly.

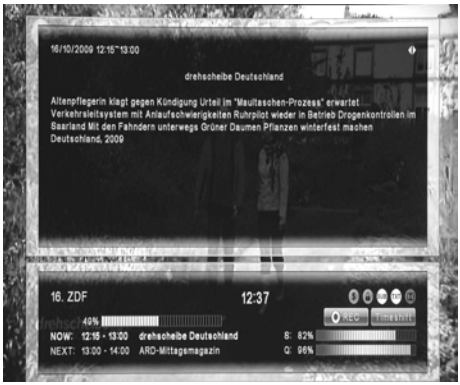
-1 Day (Yellow button): In daily mode switches to previous day.

+1 Day (Blue button): In daily mode switches to next day.

REC (Red button): Exports selected event to record list and enables to automatically record it on HDD.

EN

9.3. Information bar


16/10/2009 12:15**13:00
drehscheibe Deutschland
Altenpflegerin klagt gegen Kündigung Urteil im "Maultaschen-Prozess" erwartet
Verkehrsleitsystem mit Anlaufschwierigkeiten Rubrpilot wieder in Betrieb Drogenkontrollen im Saarland Mit den Fahndern unterwegs Grüner Daumen Pflanzen winterfest machen
Deutschland, 2009
16. ZDF
12:37
49%
NOW: 12:15 - 13:00 drehscheibe Deutschland
NEXT: 13:00 - 14:00 ARD-Mittagsmagazin
S: 62%
Q: 96%

Press **INFO** button to display **Information bar.** Information bar content:

- Index and name of actual channel,
- Actual time,
- Event progress bar,
- EPG info about Now event,
- EPG info about Next event,
- Status icons of channel (scrambled, locked, subtitles, teletext, AC3 audiotrack, recording, timeshifting,
- Strength and quality bars

Press **INFO** button once again, to display additional window with extended description about actual event from EPG.

Buttons ←,→ switches to previous/next event description.

Press **INFO** button once again, to hide Information bar and description window.

9.4. Changing services

In channel view mode, buttons ↑,↓ allow to switch to next and previous channel.

9.5. Volume control

In channel view mode, buttons ←,→ allow to decrease and increase sound volume.

9.6. Audio settings

In channel view mode, button **AUDIO (Red button)** allow to change audio settings. Buttons ←,→ switches between MonoL/MonoR/Stereo mode. Buttons ↑,↓ switches between available audio tracks.

9.7. Teletext

In channel view mode, button **TEXT (Blue button)** enables to run teletext module. User can navigate teletext module using numeric and color buttons.

9.8. Subtitle

In channel view mode, button **SUBTITLE (Green button)** allow to manage subtitles. Buttons ←,→ switches on/off subtitles. Buttons ↑,↓ switches between available subtitles.

9.9. PVR

When connecting an external Hard-Disk-Drive to the USB port, the Receiver can be used as a PVR (Digital Videorecorder). During recording you have the option to watch another channel provided it's on the same Transponder. The channels which are thus available during recording are highlighted in white characters. Accordingly, the channels in grey characters cannot be viewed during recording.

EN

9.10. Direct recording

To start a recording press the REC key, choose a duration with the ←,→ keys and confirm with the OK key.

9.11. EPG Recording

Via the EPG you can program a Timer reservation – Please also see **"9.2. EPG Browser"** for more details.

EN

9.12. TimeShift-Function

During Live TV you can press the PAUSE key to activate the TimeShift function. The Receiver pauses the program. With the PLAY key you can continue to watch the timeshifted program.

With the EXIT key or after changing to another channel the TimeShift function is de-activated.

9.13. Playback

After pressing the FILE LIST key a list is displayed which contains all the recorded programs on your connected external USB Hard-Disk-Drive. Use the ↑,↓ keys to move the cursor to the desired program and confirm with the OK key to start playback. If supported by the Channel operator, by pressing the INFO key in the file list or during playback details about the recorded program are displayed.

By pressing the REW or FF keys you can increase the playback speed to 2, 4, 8 and 16x in both directions.

To stop playback press the STOP key. By pressing the EXIT key you can return to the live channel.

NOTE: Only FAT32 formatted Hard-Disk-Drives can be used. Other formats cannot be recognized by the receiver.

EN

10. Technical specification

CPU	
Processor:	STi7101
Flash memory:	8 MB
RAM memory:	192 MB
Cable Tuner	
Input Connector:	IEC-type, IEC 169-2 Female
IF Input Frequency:	47MHz ~862 MHz
IF Loop Throughout:	IEC-type, IEC 169-2 Male
Input Level:	-93dbm ~ -35dbm
Demodulation:	16/32/64/128/256
Bandwidth:	7MHz/8MHz
Symbol Rate:	2-6,9MS/s
MPEG transport Stream A/V Decoding	
Demultiplex	According to ISO/IEC 13818-1(MPEG-2 system)
Input stream	Max. 90Mbit/s
Aspect Ratio	4:3(default), 16:9 letterbox
Video Decoding	ISO/IEC 13818-2(MPEG2 video) MP@HL, ISO/IEC 14496-10 HP@L4
Video Resolution	576p,720p or 1080i
Audio Decoding	ISO/IEC13818-3(MPEG2 audio/MUSICAM), AC-3
Audio Mode	Single Channel / Dual Channel, Stereo, Joint Stereo
Front PCB	
Display	7-Segment LED, 4 digits
Common Interface	1
Smartcard Reader	1
Rear panel	
RCA	Video, Audio L, Audio R, YPbPr
SCART	TV
S/PDIF	Coaxial
HDMI	1.2
USB, IR Connector for external IR Sensor, RS232	
Power supply	
Input Voltage	DC 12V, 3A
Power Consumption	12 W
Physical specification	
Size[W*D*H]	260mm x 215mm x 50mm
Net Weight	< 1.70 kg
Operation Temperature	5℃~+45℃
Storage Temperature	-10℃~+70℃
Storage Humidity	5%~95% RH (Non-Condensing)

Weight and dimensions are not absolutely exact values.
Specifications are subject to change (by manufacturer) without notice.

EN

11. Declaration of conformity

The manufacturer herewith declares the conformity of that product with the following directives and standards:

Low Voltage Directive 2006/95/EG

EN 60065:2002+A1:2006

EMC Directive 2004/108/EG

EN 55 013:2001+A1:2003+A2:2006

EN 55 020:2007

EN 61 000-3-2:2006

EN 61 000-3-3:1995+A1:2001+A2:2005

Model: Digital Cable Receiver DVB-C

CE

EN